



# WELCOME!

Congratulations on your new furry family member. As with human babies, puppies have unique medical needs during their first year of life. Here at Arden Shoreview Animal Hospital, we have a great program to help prevent disease and to nurture your new family member into healthy adulthood.

A physical exam is performed at each visit to check for any detectable genetic abnormalities and to monitor the early growth phases - both physically and mentally.

Vaccines are necessary to prevent contagious diseases in your new puppy. A puppy receives protective immunity from its mother upon nursing. As the puppy grows, this protection gradually decreases. To stimulate the puppy's own immune system into building-up self-protection, vaccines are administered. A series of vaccines is necessary to initially introduce the puppy's immune system and then to naturally increase the immune system's response to fight-off infection.

Parasite control is crucial to a healthy puppy. Virtually all puppies are infected with intestinal parasites by exposure through the placenta, nursing, and from the environment. Stool samples are reviewed to help us detect specific

infections so that they may be treated correctly. Contrary to popular belief, spaying or neutering your new pet will not change their personality. It makes them better family members. They can better focus on their relationship with you and your family.

Congratulations again on your new family member! We look forward to watching them grow with you. Please feel free to let us know anytime you have questions or concerns. Our goal is to help make your new family member just that - family. Through your responsible ownership, keeping on schedule with routine preventative care, and lots of love, you will reach that goal.





# PUPPY VACCINATION SCHEDULE

The following list details routine vaccinations for puppies. Your puppy's veterinarian may adjust the vaccinations based on their recommendations.

- Heartworm prevention is recommended year-round for all dogs
- Flea and tick prevention is recommended for all dogs from March through November (minimally)
- Dogs should be spayed/neutered at approximately 6 months of age

## 8 WEEKS

DATE

- Complete Physical Exam
- DHPP Vaccination #1 core vaccine
- Fecal Parasite Screen/Deworming
- Bordetella

## 12 WEEKS

DATE

- Complete Physical Exam
- DHPP Vaccination #2 core vaccine
- Fecal Parasite Screen/Deworming
- +/- Lepto #1
- +/- Lyme #1

## 16 WEEKS

DATE

- Complete Physical Exam
- DHPP Vaccination #3 core vaccine
- +/- Lepto #2
- +/- Lyme #2
- Rabies Vaccination #1 core vaccine
- Preanesthetic Bloodwork

## 16 MONTHS

DATE

- Complete Physical Exam
- Rabies Vaccination core vaccine
- DHPP Vaccination core vaccine
- Bordetella Vaccination
- Leptospirosis Vaccination
- Lyme Vaccination
- Labwork - fecal parasite/heartworm screening and bloodwork





# What you should know about vaccines in your pets

The virtual eradication of polio in humans is just one example of the vital power provided by vaccinations, and they are just as important for pets. Throughout their lives, your pets will likely be exposed to several infectious diseases that can cause severe illness or even death. If you take the necessary steps to prevent infection through vaccination, you will greatly extend the life of your pets.

## **WHICH VACCINES SHOULD MY PET RECEIVE?**

Your veterinarian will recommend several core vaccines all pets should receive in order to maintain their health and prevent serious disease. For dogs, these vaccines may include rabies, parvovirus, adenovirus, and distemper. For cats, core vaccinations may include rabies, panleukopenia virus, herpesvirus, and calicivirus. If you are boarding a pet, the facility may require vaccination against *Bordetella bronchiseptica*, a bacteria that causes a common and highly contagious disease known as kennel cough. Your veterinarian may recommend additional vaccines as well, depending on where you live, your pet's lifestyle and level of health, and the risk your pet has of passing on the disease to other animals, or even your family.

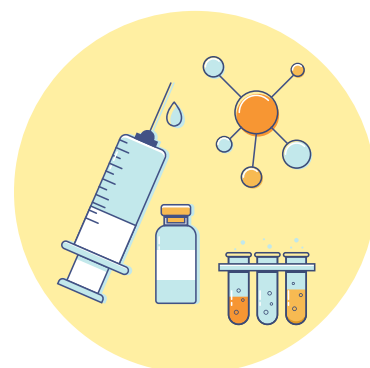
## **WHAT SHOULD I BE ON THE LOOKOUT FOR AFTER MY PET HAS BEEN VACCINATED?**

Vaccines can cause side effects, but they are very mild in most cases. Your pet may experience a mild fever, have a decreased appetite, or be a bit sluggish for a day or two after vaccination. In addition, you may notice slight swelling or pain near the vaccination site. These are all normal reactions and do not require medical attention.

However, rare, and more severe reactions can occur that may result in swelling in the face or limbs, generalized itching, difficulty breathing, vomiting, diarrhea, or collapse. If any of these more serious signs develop or you are concerned about any reaction in your pet, don't hesitate to contact the veterinary clinic immediately to schedule an appointment.

## **HOW OFTEN DOES MY PET NEED TO BE VACCINATED?**

The frequency of vaccination will vary depending on where you live. For example, some states require a rabies vaccine once a year for dogs and cats, while other states may allow less frequent rabies vaccination. Your veterinarian can inform you about your state's regulations and the best timing of other vaccinations.







Canine distemper is a contagious and serious disease caused by a virus that attacks the respiratory, gastrointestinal, and nervous systems of puppies and dogs. The virus can also be found in wildlife such as foxes, wolves, coyotes, raccoons, skunks, minks, and ferrets.

#### HOW IS CANINE DISTEMPER SPREAD?

Puppies and dogs most often become infected through airborne exposure (through sneezing or coughing) to the virus from an infected dog or wild animal. The virus can also be transmitted by shared food and water bowls and equipment. Infected dogs can shed the virus for months, and mother dogs can pass the virus through the placenta to their puppies.

Because canine distemper also impacts wildlife populations, contact between wild animals and domestic dogs can facilitate the spread of the virus. Canine distemper outbreaks in local raccoon populations can signal increased risk for domestic dogs in the area.

#### WHAT DOGS ARE AT RISK?

All dogs are at risk but puppies younger than four months old and dogs that have not been vaccinated against canine distemper are at increased risk of acquiring the disease.

#### WHAT ARE THE SYMPTOMS OF CANINE DISTEMPER?

Initially, infected dogs will develop watery to pus-like discharge from their eyes. They then develop fever, nasal discharge, coughing, lethargy, reduced appetite, and vomiting. As the virus attacks the nervous system, infected dogs develop circling behavior, head tilt, muscle twitches, convulsions with jaw chewing movements and salivation ("chewing gum fits"), seizures, and partial or complete paralysis. The virus may also cause the footpads to thicken and harden, leading to its nickname, "hard pad disease."

In wildlife, infection with canine distemper closely resembles rabies. Distemper is often fatal, and dogs that survive usually have permanent, irreparable nervous system damage.

#### HOW IS CANINE DISTEMPER DIAGNOSED AND TREATED?

Veterinarians diagnose canine distemper through clinical appearance and laboratory testing. There is no cure for canine distemper infection. Treatment typically consists of supportive care and efforts to prevent secondary infection. Measures can be taken to control vomiting, diarrhea, and neurological symptoms. Administration of fluids can assist with combating dehydration. Dogs infected with canine distemper should be separated from other dogs to minimize the risk of further infection.

#### HOW IS CANINE DISTEMPER PREVENTED?

**Vaccination is crucial in preventing canine distemper.**

- A series of vaccinations are administered to puppies to increase the likelihood of building immunity when the immune system has not yet fully matured.
- Avoid gaps in the immunization schedule and make sure distemper vaccinations are up to date.
- Avoid contact with infected animals and wildlife.
- Use caution when socializing puppies or unvaccinated dogs at parks, puppy classes, obedience classes, doggy day care, and other places where dogs can congregate.
- Pet ferrets should be vaccinated against canine distemper using a USDA-approved ferret vaccine.



## LET'S LEARN ABOUT DISEASE

# CANINE PARVOVIRUS

(VIRUS)

Canine parvovirus is a highly contagious virus that can affect all dogs, but unvaccinated dogs and puppies younger than four months old are the most at risk. Dogs that are ill from canine parvovirus infection are often said to have “parvo.” The virus affects dogs’ gastrointestinal tracts and is spread by direct dog-to-dog contact and contact with contaminated feces (stool), environments, or people. The virus can also contaminate kennel surfaces, food and water bowls, collars and leashes, and the hands and clothing of people who handle infected dogs. It is resistant to heat, cold, humidity, and drying, and can survive in the environment for long periods of time. Even trace amounts of feces from an infected dog may harbor the virus and infect other dogs that come in contact with the infected environment. The virus is readily transmitted from place to place by the fur or feet of dogs or via contaminated cages, shoes, or other objects.



### SIGNS OF PARVOVIRUS

Some of the signs of parvovirus include lethargy, loss of appetite, abdominal pain and bloating, fever or low body temperature (hypothermia), vomiting, and severe, often bloody, diarrhea. Persistent vomiting and diarrhea can cause rapid dehydration, damage to the intestines and immune system, which can cause septic shock.

If your puppy or dog shows any of these signs, you should contact your veterinarian immediately. Most deaths from parvovirus occur within 48 to 72 hours following the onset of clinical signs. If your puppy or dog shows any of these signs contact your veterinarian immediately.

### DIAGNOSIS AND TREATMENT

Parvovirus infection is often suspected based on the dog’s history, physical examination, and laboratory tests. Fecal testing can confirm the diagnosis.

No specific drug is available that will kill the virus in infected dogs, and treatment is intended to support the dog’s physical systems until the dog’s immune system can fight off the viral infection. Treatment should begin immediately and consists primarily of intensive care efforts to combat dehydration by replacing electrolyte, protein and fluid losses, controlling vomiting and diarrhea, and preventing secondary infections. Sick dogs should be kept warm and receive good nursing care. When a dog develops parvo, treatment can be very expensive, and the dog may pass away despite aggressive treatment. Early recognition and aggressive treatment are very important in successful outcomes. With proper treatment, survival rates can approach 90%.

Since parvovirus is highly contagious, isolation of infected dogs is necessary to minimize the spread of infection. Proper cleaning and disinfecting of contaminated kennels and other areas where infected dogs are (or have been) housed is essential to control the spread of parvovirus. The virus is not easily killed, so consult your veterinarian for specific guidance on cleaning and disinfecting agents.



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#### PREVENTING PARVOVIRUS

Vaccination and good hygiene are critical components of prevention.

Young puppies are very susceptible to infection, particularly because the natural immunity provided in their mothers' milk may wear off before the puppies' own immune systems are mature enough to fight off infection. If a puppy is exposed to canine parvovirus during this gap in protection, it may become ill. An additional concern is that immunity provided by a mother's milk may interfere with an effective response to vaccination. This means even vaccinated puppies may occasionally be infected by parvovirus and develop the disease.

To reduce gaps in protection and provide the best protection against parvovirus during the first few months of life, a series of puppy vaccinations are administered. Puppies should receive a dose of canine parvovirus vaccine between 14 and 16 weeks of age, regardless of how many doses they received earlier in order to develop adequate protection.

To protect adult dogs, pet owners should ensure that their dog's parvovirus vaccination is up-to-date. Ask your veterinarian about a recommended prevention program for your dog.

Until a puppy has received its complete series of vaccinations, pet owners should use caution when bringing their pet to places where young puppies congregate (e.g. pet shops, parks, puppy classes, obedience classes, doggy daycare, kennels, and grooming establishments). Reputable establishments and training programs reduce exposure risk by requiring vaccinations, health examinations, good hygiene, and isolation of ill puppies and dogs. Contact with known infected dogs and their premises should always be avoided.

In spite of proper vaccination, a small percentage of dogs do not develop protective immunity and remain susceptible to infection. Finally, do not let your puppy or adult dog come into contact with the fecal waste of other dogs while walking or playing outdoors. Prompt and proper disposal of waste material is always advisable as a way to limit spread of canine parvovirus infection as well as other diseases that can infect humans and animals.

Dogs with vomiting or diarrhea or other dogs that have been exposed to ill dogs should not be taken to kennels, show grounds, dog parks, or other areas where they will come into contact with other dogs. Similarly, unvaccinated dogs should not be exposed to ill dogs or those with unknown vaccination histories. People who are in contact with sick or exposed dogs should avoid handling other dogs or at least wash their hands and change their clothes before doing so.





## LET'S LEARN ABOUT DISEASE

# LEPTOSPIROSIS

(BACTERIA)

Leptospirosis is a disease caused by infection with *Leptospira* bacteria. These bacteria can be found in soil and water worldwide. There are many strains of *Leptospira* bacteria that can cause disease. Leptospirosis is a zoonotic disease, which means it can be spread from animals to people. Infection in people can cause flu-like symptoms and can cause liver or kidney disease. In the United States, most cases of human leptospirosis result from recreational activities involving water. Infection resulting from contact with an infected pet is much less common but is possible. Leptospirosis is more common in areas with warm climates and high annual rainfall, but it can occur anywhere.



### RISK FACTORS FOR LEPTOSPIROSIS

Dogs are most commonly affected. Leptospirosis in cats is rare and appears to be mild, although very little is known about the disease in this species. Common risk factors for leptospirosis in dogs residing in the United States include exposure to or drinking from rivers, lakes, or streams; roaming on rural properties (because of exposure to potentially infected wildlife, farm animals, or water sources); exposure to wild animal or farm animal species, even if in the backyard; and contact with rodents or other dogs.

Dogs can become infected and develop leptospirosis if their mucous membranes (or skin with any wound, such as a cut or scrape) come into contact with infected urine. The most common ways of contact include urine-contaminated soil, water, food or bedding, through a bite from an infected animal, by eating infected tissues or carcasses, and rarely, through breeding. It can also be passed through the placenta from the mother dog to the puppies.

### SIGNS OF LEPTOSPIROSIS

The signs of leptospirosis in dogs vary. Some infected dogs do not show any signs of illness, some have a mild and transient illness and recover spontaneously, while others develop severe illness which can lead to death.

Signs of leptospirosis may include fever, shivering, muscle tenderness, reluctance to move, increased thirst, changes in the frequency or amount of urination, dehydration, vomiting, diarrhea, loss of appetite, lethargy, jaundice (yellowing of the skin and mucous membranes), or painful inflammation within the eyes. The disease can cause kidney failure with or without liver failure. Dogs may occasionally develop severe lung disease and have difficulty breathing. Leptospirosis can cause bleeding disorders, which can lead to blood-tinged vomit, urine, stool or saliva, nosebleeds, and pinpoint red spots (which may be visible on the gums and other mucous membranes or on light-colored skin). Infected dogs can also



**(continued)**

develop swollen legs (from fluid accumulation) or accumulate excess fluid in their chest or abdomen.

Leptospirosis may be suspected based on the exposure history and signs shown by the dog, but many of these signs can also be seen with other diseases. In addition to a physical examination, your veterinarian may recommend a number of other tests such as blood tests, urine tests, radiographs (x-rays), and an ultrasound examination.

#### **TREATMENT AND PREVENTION**

Leptospirosis is generally treated with antibiotics and supportive care. When treated early and aggressively, the chances for recovery are good but there is still a risk of permanent residual kidney or liver damage.

Vaccines currently available effectively prevent leptospirosis and protect dogs for at least 12 months. Annual vaccination is recommended. Although an infected dog presents a low risk of infection for you and your family, there is still some risk. If your dog has been diagnosed with leptospirosis, take the following precautions to protect yourself:

- Administer antibiotics as prescribed by your veterinarian.
- Avoid contact with your dog's urine. If your dog urinates in your home, quickly clean the area with a household disinfectant, and wear gloves to avoid skin contact with the urine.
- Encourage your dog to urinate away from standing water or areas where people or other animals will have access.
- Wash your hands after handling your pet.

If you are ill or if you have questions about leptospirosis in people, consult your physician. If you are pregnant or immunocompromised (due to medications, cancer treatment, HIV, or other conditions), consult your physician for advice.



# PROTECT YOUR PET: HEARTWORMS

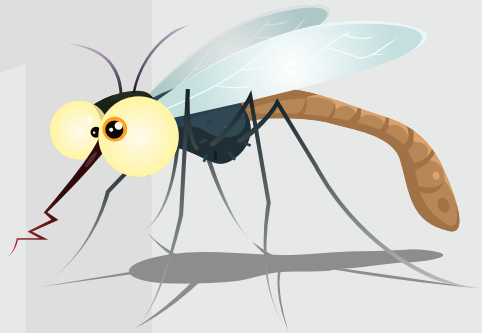


**Heartworm disease is prevalent in all 50 states.**

It is estimated that one million dogs in the U.S. have heartworm disease today.

**It only takes one bite from an infected mosquito to spread heartworm disease to a pet.**

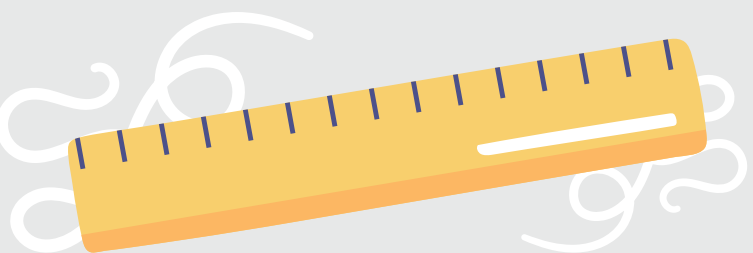
Pets should be protected from heartworm each month of the year. It takes approximately six months after being bitten by an infected mosquito for a dog to test positive for heartworms. Dogs should be tested for heartworm every 12 months.



**Heartworm prevention is much less expensive than treatment. Treatment can cost more than 15x that of a year's worth of heartworm preventive.**

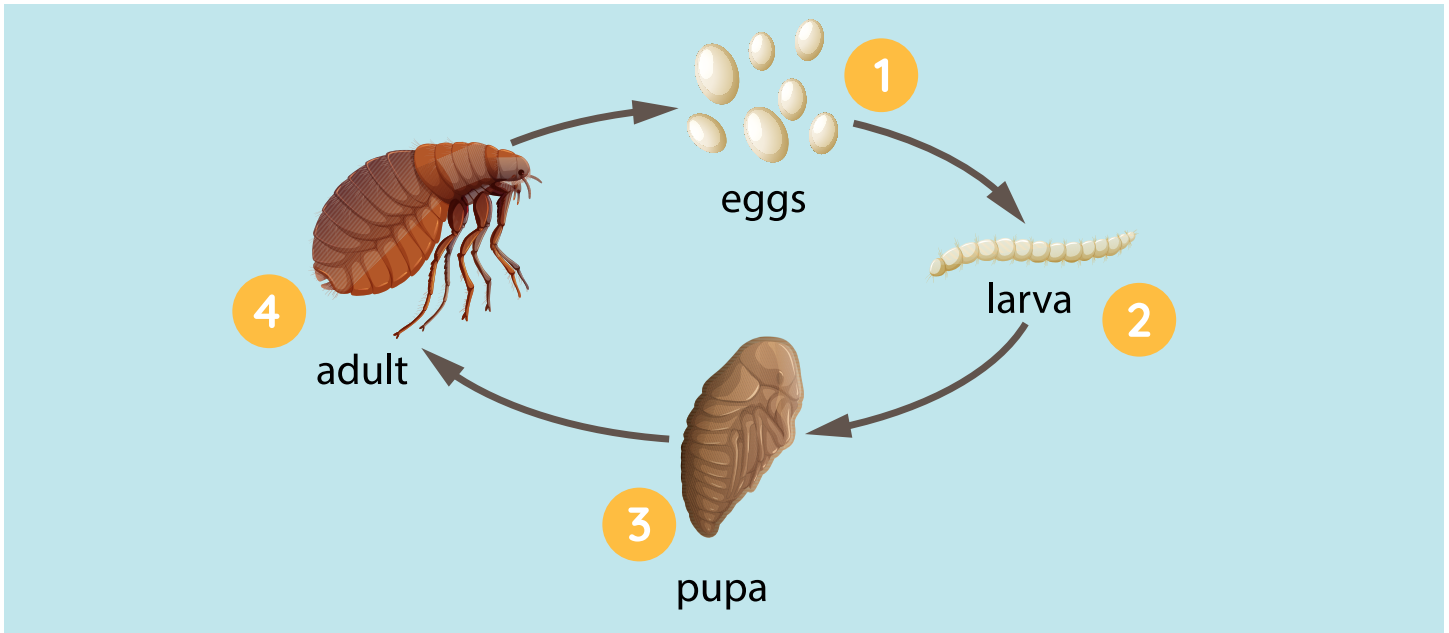
Once mature, heartworms can live up to seven years in a dog. There is only one approved treatment for heartworm in dogs. There are zero approved treatments for heartworm in cats.

**Heartworms that live in a pet's heart, lungs, or blood vessels can grow more than 12 inches in length.**



# LIFE CYCLE: Fleas

Any pet owner who has had trouble with fleas on their dog or cat knows how quickly an infestation of these pint-sized pests can spiral out of control. But how does it go from one flea to hundreds, even thousands, so quickly?



## 1. EGGS

Eggs are deposited on the pet and fall into the environment within a few hours.

## 2. LARVAE

Larvae are maggot-like and approximately 0.5 cm long. They feed on blood in adult flea feces, organic debris, flea eggshells, and other flea larvae.

- Flea larvae develop outdoors in cool, shady areas where pets rest as well as indoors in undisturbed, protected sites such as carpet, under furniture, and long baseboards.

## 3. PUPA

Whitish cocoons can be found in soil, on vegetation, in carpets, under furniture, and on animal bedding.

- Adults emerge about eight days after formation of the cocoon. All fleas usually emerge by day 13, depending on temperature and relative humidity.

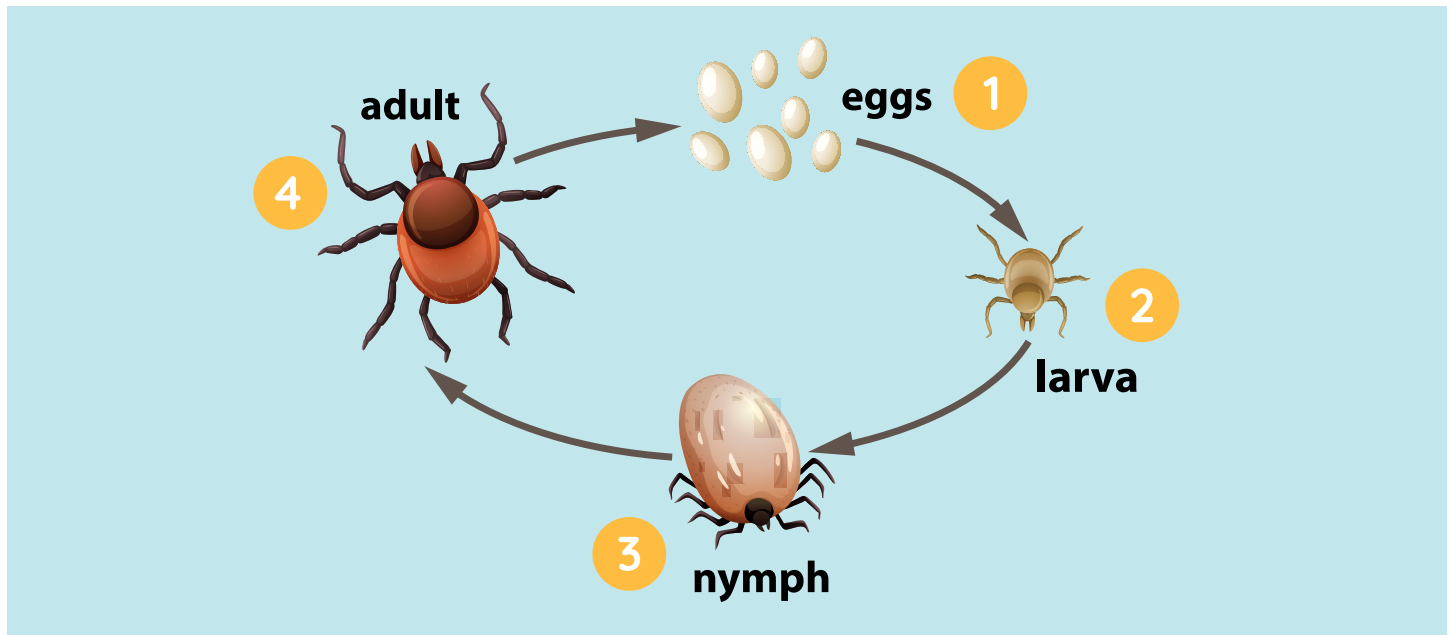
## 4. ADULT

Adults usually begin feeding within three minutes of being on a pet.

- Egg production begins within 20 to 24 hours of females taking their first blood meal.
- Female fleas can produce 40 to 50 eggs per day – that's nearly 3,000 fleas in two months!
- During the warm summer months, the entire flea life cycle can be completed within two to three weeks.

# LIFE CYCLE: Ticks

Ticks are second only to mosquitoes in the number of diseases they transmit, which is why it's so critical to prevent ticks from attaching to – and feeding on – pets and people in the first place. Understanding the tick life cycle and the behavior of these pesky parasites can help keep them in check.



## 1. EGGS

An engorged female tick can lay up to several thousand eggs in sheltered environments (not on a host).

## 2. LARVAE

The six-legged larval stage hatches from the egg within weeks or months, depending on environmental conditions. Larvae remain on the ground or on low vegetation waiting for a host, which is usually a bird or small mammal.

## 3. NYMPH

After feeding on a host for several days, the engorged larva drops to the ground and molts to an eight-legged nymph. The nymph then finds an appropriate host and feeds for several days to a week.

## 4. ADULT

Once the nymph has engorged, it drops to the ground and molts to the eight-legged adult, which then must find a third host – you or your pet, maybe?

- *Ticks can survive in less-than-ideal environmental conditions, which is why it's so important to use year-round parasite protection.*



# Parasites at a Glance

Parasites can cause a variety of health problems for your pet and may even result in death. One of the biggest concerns is the potential for them to spread to humans. The table below lists common parasites found in cats and dogs, signs and complications of infestations, and whether or not they can spread to humans - known as zoonotic parasites.

Veterinarians divide parasites into two main categories-external (ectoparasites) and internal (endoparasites). Fleas, ticks, and mites are ectoparasites. Endoparasites, such as heartworms or tapeworms are often harder to detect but typically cause more severe disease. Here's a look at both:

ECTOPARASITES	SIGNS AND COMPLICATIONS	ZOONOTIC	DETECTION
<b>FLEAS</b>	<ul style="list-style-type: none"> <li>Mild to severe itching, scratching, biting, and chewing</li> <li>Flea saliva hypersensitivity or allergy and resulting skin problems</li> <li>The transmission of tapeworms: Anemia and possible death in young or small animals</li> </ul>	NO	<p>Examination of the animal for adult fleas, flea dirt, or small black specks of dried flea feces</p> <p>A blood test can detect a flea allergy</p>
<b>TICKS</b>	<ul style="list-style-type: none"> <li>Mild, local irritation to severe anemia</li> <li>Transmission of other diseases to animals and humans Lyme disease, Rocky Mountain spotted fever, and Ehrlichia, among others</li> </ul>	YES	Examination of the animal
<b>MITES &amp; LICE</b> The three main types: sarcoptic mange, demodectic mange, and Cheyletiella	<ul style="list-style-type: none"> <li>Itching, hair loss, dandruff or crusty lesions, and bleeding or oozing skin</li> </ul>	SOME MITES: YES LICE: NO	Examination of the animal and skin scrapings
ENDOPARASITES	SIGNS AND COMPLICATIONS	ZOONOTIC	DETECTION
<b>HEARTWORMS</b> Transmitted through the bite of an infected mosquito	<ul style="list-style-type: none"> <li>May not exhibit signs until late in the course of the disease</li> <li>Coughing, difficulty breathing, panting, exercise intolerance, decreased activity level, and sudden death</li> </ul>	NO	Blood Test
<b>Roundworms &amp; Hookworms</b> Live in the gastrointestinal (GI) tract; transmitted through fecal-oral contact and from mother to offspring	<ul style="list-style-type: none"> <li>Diarrhea, anemia, and loss of body condition</li> </ul>	YES	<ul style="list-style-type: none"> <li>Fecal Examination</li> <li>Observation of worms</li> </ul>
<b>TAPEWORMS</b> Live in the GI tract; transmitted from ingestion of fleas, rodents, and rabbits	<ul style="list-style-type: none"> <li>None to diarrhea, weight loss, and poor body condition</li> </ul>	YES	<ul style="list-style-type: none"> <li>Observation of tapeworm segments in freshly passed feces</li> <li>Fecal Examination</li> </ul>

Our practice offers both preventive and curative treatments for parasites. Of course, we prefer to prevent parasites, to save your pet the discomfort of parasite infestation and minimize your family's risk. Speak with your veterinarian to learn which products are right for your pet.

# HOW TO BRUSH YOUR DOG'S TEETH

Don't know where to start? It's not as hard as you think. Try these easy (and fun) first steps!



1



Place dog toothpaste on your finger. Let the dog lick it as you gently introduce a finger into its mouth. Rub and massage the gums.

2



Place dog-friendly toothpaste on a cotton-tipped swab and rub along the gum line.

3



Use a wet washcloth-soaked in chicken or beef broth-to massage the teeth and gums.

4



Use rubber toys, such as Kongs. Apply dog toothpaste to the surface or grooves and let the dog chew on them.

5



Offer hard, crunchy treats, such as carrots, apples or rice cakes. These are natural toothbrushes that help keep teeth clean and massage the gums. (While nothing works as good as a toothbrush, there are always alternatives. If the dog doesn't like the taste of toothpaste, you can just use water).

# CHEW ON THIS!

You can help keep your pets' teeth strong and healthy at home-and positively impact their overall health - using these tips for home dental care and pet toothbrushing.



## 1. Start brushing their teeth as soon as possible.

8 to 12 weeks old is best. If you brush every day, your pet will become familiar with the routine when their permanent teeth erupt. Please note: you may need to stop brushing while your pet is losing their baby teeth. Their mouth will be a bit sore and handling may cause more pain. Continue once all the permanent teeth come in.

## 2. Work with your pet's mouth.

Be patient and make it fun. Use love and praise, and try to practice at the same time each day to establish a routine. Choose a quiet time, such as late in the evening, or if your pet is highly motivated by food, try just before dinner so your pet will be rewarded for cooperation.

## 3. Handle the muzzle and touch your pet's lips.

Work up to rubbing the teeth and gums with your finger. Put a few drops of water flavored with low-sodium chicken or beef bouillon for dogs and tuna juice for cats in their mouth they'll begin to look forward to these sessions.

## 4. Use a bouillon-or tuna-flavored washcloth.

Put bouillon, broth, or tuna on a piece of gauze wrapped around the end of your finger to rub the teeth gently.

## 5. Finally, use a finger brush or a soft veterinary or human toothbrush.

Brush the teeth using the bouillon water or tuna juice. Hold the brush at a 45-degree angle to the tooth and brush gently back and forth or in a circular pattern from gum to tip. Brushing the tongue side of the teeth is less critical, but still good. Offer rewards and treats when your pet allows you to brush to keep it a good experience.

## 6. Consider other dental aids.

A large selection of veterinary toothpastes, oral rinses, and gels are available to you. Our veterinary team can help you select the one right for you and your pet. These products all enhance your home care program, but daily brushing is best. Avoid human toothpaste because fluoride and detergents can be harmful if swallowed. Hydrogen peroxide can be harsh on the gums and shouldn't be swallowed either. Baking soda has a high sodium content and should be avoided in older pets.

## 7. Pick kibble and rubber chew toys.

This will help keep the teeth clean. Avoid natural bones, which are hard enough to fracture teeth. Your veterinarian can recommend a complete and balanced professional diet to use at feeding time and as a treat.



# SPAY & NEUTER

## Important reasons to spay or neuter your pet.

More than four million pets are euthanized in U.S. animal shelters each year simply because they don't have a home. Many are puppies and kittens as young as 6 months old. Help stop this needless loss of life - spay and neuter your pet.

### Spaying your female pet (ovariohysterectomy)

**Removal of the ovaries and uterus.**

**Ideal age for spay is 6 months old** (unless your veterinarian advises you otherwise).

- Eliminates the risk of ovarian and uterine cancer.
- Eliminates unwanted pregnancies.
- If spayed before the first heat cycle, your pet has a less than 1 percent chance of developing breast cancer. If spayed after one heat cycle, your pet has an 8 percent chance of developing breast cancer. If spayed after two heat cycles, the risk increases to 26 percent. After two years, no protective benefit exists.
- Pets with diabetes or epilepsy should be spayed to prevent hormonal changes that may interfere with medication.

### Neutering your male pet (castration)

**Removal of the testicles and spermatic cord.**

**Ideal age for neuter is 6 months old.**

- Eliminates the risk of testicular cancer, the second most common cancer in male dogs.
- Greatly reduces the risk of prostate cancer and prostatitis.
- Reduces the risk of perianal tumors.
- Reduces roaming and fighting.
- Eliminates or reduces spraying or marking in males neutered before 6 months of age or before the onset of these behaviors.
- Eliminates the risk and spread of sexually transmitted diseases.
- Eliminates unwanted litters.

### Common myths

**Removal of the testicles and spermatic cord.**

- Causes laziness or hyperactivity
- Reduces its instinct to protect your family and home
- Causes immature behaviors
- Postpones or delays normal behavioral maturity
- Alters his personality in any manner



**Our staff members can answer your questions about spaying or neutering your pet or any other procedure your pet may undergo at our hospital. Please don't hesitate to ask.**

# What Do Our Anesthetic Procedures Involve?

**Pre-Anesthetic Blood Screening:** These tests help us assess the function of the major organs, like the liver and kidneys. This helps us identify any problems your pet may have systemically and tailor our anesthetic protocol to meet his or her needs.

**Pre-Surgical Exam:** The morning of the procedure, a doctor will examine your pet to make sure that nothing new has come up. This is done regardless of how recent prior to the procedure your pet was seen. As we all know, many types of illnesses can arise quickly.

**Pre-Surgical Sedative:** To make sure the procedure goes as smoothly as possible and to offer pain relief during the procedure for your pet, we pre-medicate your pet with a sedative. This makes it more comfortable for your pet to have the IV catheter placed and allows less general anesthetic to be given. The lower the amount of general anesthetic needed, the safer the procedure will be.

**IV Catheter and IV Fluids:** By placing and maintaining an IV catheter, we have instant access to the blood system and are able to immediately give emergency drugs if needed. The IV fluids help us maintain the proper blood pressure, which in turn helps to keep blood flowing through the major organs.

**General Anesthesia and Intubation:** The general anesthetics we use are some of the same that human hospitals use when working with children. They are extremely safe and tailored specifically for each individual pet. The first anesthetic used is a short acting medication that is injected through the IV catheter. Once your pet is asleep, we place a tube into the airway. This ensures that your pet has an open airway throughout the entire procedure and that nothing but air can pass into the lungs. We then connect an inhalant (gas) anesthetic to the tube to maintain a safe level of constant, yet adjustable, anesthesia.

**Monitoring:** While under anesthesia, your pet is continuously monitored by a certified veterinary technician. This is in addition to mechanical monitoring for blood pressure, EKG, temperature, and blood oxygen level. This allows us to react to any abnormalities before they become a problem.

**Care During Recovery:** Recovery is a time when many pets become disoriented and sometimes get scared. To help them have the easiest recovery possible, a certified veterinary technician stays with them until they wake up. We will then give you a call to let you know they are awake and confirm their discharge appointment time.

**Post-Surgical Pain Medication:** Surgery and dental extractions are all painful procedures. Many times when a painful procedure is performed, the pain will continue for a few days afterward. To make your pet more comfortable, we will send you home with a few days worth of pain medication post-procedure.

**Dental Cleaning:** Prior to cleaning, the teeth and gums are charted to assess their health and to record any abnormalities. The tartar on the teeth is then removed with an ultrasonic scaler and hand instruments, the same ones used in many human dentists' offices. With these instruments, we can clean under the gums where most of the plaque and bacteria accumulates. Once clean, we polish the teeth to smooth the surface and slow tartar growth.

**Dental Radiographs:** We have digital dental radiography. This is a state-of-the-art x-ray unit that allows for better quality and faster radiographs. The ability to take quick radiographs means that your pet doesn't have to stay under anesthesia as long as they would with conventional x-ray units. Radiographs are important to assess the health of the teeth, get a better visual image of the structures below the gum line, and to ensure that roots aren't left behind after extraction.

# TRAINING GUIDELINES



## HOUSE TRAINING

House training your dog can be a very trying experience. It requires patience and dedication. The more consistent you are in following the guidelines below, the better chance you will have with correctly training your dog. It may take several weeks to housetrain your dog, so the most important key is to be consistent and don't give up!

### 1. Institute a routine

In the beginning, start by taking your dog outside frequently (every 1 to 2 hours) and immediately after they are done eating, playing, or taking a nap. Keep a close eye on your dog whenever they are in the house to avoid giving them the chance to soil in the house. Some owners like to leash their dog to themselves, so that way they can watch them at all times and take them outside as soon as they notice that they have to go. Pick a specific area in the yard that you can continually take your dog while associating a command, such as "go potty" or "potty time." This will help remind your dog what is expected when they go to that area. Putting your dog on a regular feeding schedule will also help with house training. Remember to take them outside as soon as they are done eating and praise them when they do go potty outside.

### 2. Preventing mistakes

The biggest setback will be allowing them to eliminate indoors. It will inevitably happen, but it is up to you to correct the bad behavior.

- **When caught in the act:** Do something to interrupt the elimination, such as making a loud noise, using a spray bottle, etc. Take your dog immediately out to the potty spot and while they finish their business, praise them for good behavior
- **When finding a previously soiled spot:** DO NOT PUNISH your dog by rubbing their nose in it or scolding them! It is too late for correction and these actions will only make them afraid of you. The soiled area must be cleaned thoroughly to avoid creating a pattern.
- **Confinement:** When you are not able to monitor your dog, they should be confined to a small area, such as a crate, small portion of the bathroom, etc. The smaller the area, the less likely they are to soil in it. Ideally, they should have enough room to stand-up and turn around. Any larger and they may take advantage of soiling in one part and laying in another.
- **Paper training:** Training your dog to eliminate on paper indoors may work for some families, but it may delay house training and may cause confusion for your dog. Many dogs that associate urinating indoors on paper or potty pads, may confuse these with rugs, carpet, etc.

### 3. Distractions

Many puppies get distracted when they are outside. There are new smells, sounds, animals to watch, etc. It is important that you bring your dog to the "potty area" and allow them time to go. If you notice your dog wants to play or gets distracted, make sure to bring them back to the "potty area" and give them time to finish. Many owners state that they bring their dog outside and as soon as they come back inside, they soil. This is probably due to the distractions outside and not finishing their business. Keep an eye on this.



# TRAINING GUIDELINES

(continued)



## CRATE TRAINING



Crate training your dog can take days to weeks to accomplish. Your dog's age, temperament, and past experiences can influence the outcome of the training. The training should be gradual and pleasant for your dog. **NEVER** use the crate as a punishment! Crating may sound mean to some, but most dogs love their crates. It provides a secure, safe, and comforting area for your dog to go whenever they feel scared or anxious. Crating also keeps your dog out-of-trouble when you are away.

### 1. Choosing the proper-sized crate

There are many types of crates available. Choosing one can be difficult. If you plan on traveling and need one that collapses, then that may be the best choice for you and your pet. Ideally, the crate should be plastic and not see-through. This allows your dog a safe area to hide and to not harm themselves. There have been instances of dogs injuring themselves trying to get out of the metal, collapsible crates. The crate should be just big enough for your dog to stand-up and turn-around. You will need to purchase larger crates as your dog grows.

### 2. Introducing your dog to the crate

It is ideal to place the crate in a room where your family spends time, so that your dog can still see and interact with the family. Start by placing toys, treats, and some bedding inside the crate to encourage your dog to voluntarily enter. You can also feed your dog in the crate to encourage positive memories with the crate. After several instances of your dog entering and even staying in the crate, progress to sessions of closing the door to confine them for several minutes, gradually increasing the time. You can expect some distress during the initial times of confinement, while your dog acclimates to the crate. Avoid excessive correction and never let your dog out while it is crying/whining. Wait until they calm down and then let them out. Young puppies should be crated for a few hours at a time, to help prevent eliminations in the crate. If you are unable to let your puppy out after a few hours, wait to crate-train to avoid accidents.

### 3. Issues

If your dog becomes anxious/uncomfortable with crating, go back to smaller amounts of time and place treats and toys in with them to encourage behavior. In the case of persistent problems, separation anxiety or fear-related problems should be considered. Consult with your veterinarian with any concerns.



# TRAINING GUIDELINES

(continued)



## BASIC TRAINING



Training should begin as early as possible. The earlier you start, the easier and faster it is to prevent bad behavior. When training, it is important to remember to use proper training techniques such as positive motivation to encourage compliance. The most influential motivational factors are food, affection, toys, and social attention. Using the dog's dry food and vegetables are the healthiest ways to use food as praise, as treats often have a lot of calories. Remember to calculate a smaller amount of food at meal times to accommodate for training with food. Always give the reward immediately after they produce the desired response. As your dog becomes better at training, begin using less food with training and only praise with food when a perfect response is given.

### 1. Sit Command

Begin with your dog in the standing position. Hold a piece of food just in front of their nose and raise it up so that their nose follows and they are forced to sit. Say "sit" while doing this motion and your dog sits down. Give the food as a reward.

### 2. Lie Down Command

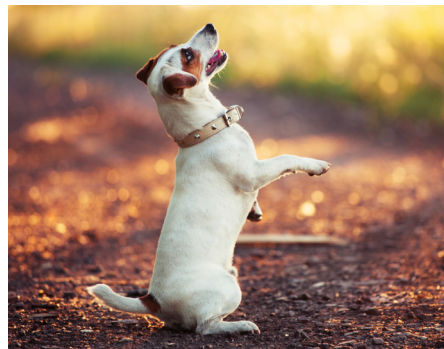
Start with your dog in a sitting position. Hold a piece of food directly in front of their nose. With a quick motion, move the food straight down to the floor in between the dog's front paws. As your dog slides into the down position, say the command "down" or "lay" and then give the reward. Try teaching this command on a smooth surface that they are comfortable with. Remember to emphasize the hand-motion and the verbal command to increase their learning experience.

### 3. Come Command

The come command is usually quite simple. Begin by holding a piece of food out in front of you. As your dog approaches you, say the command "come" and then give the reward after they have complied. Back up and repeat this command.

### 4. Stay Command

The best time to start training this command is after they have exercised. This will allow them to be calmer during training. Begin in a sit position with the palm of your hand toward your dog. Make eye contact and firmly say "stay." Take one step back, wait one second, then return and give the reward. Repeat this while increasing the length of time and space between rewards.



# HOW TO PREPARE.

## How to prepare your house for an incoming dog or puppy.

Puppies and kittens are naturally curious, which can lead to injury if you are not prepared. Here are some tips on how to prepare your house for their arrival and items that could be dangerous or toxic to your pets.

1. Animals love to chew, especially while they are teething. Keep electrical wires out of reach or covered so that they can't chew them and accidentally get shocked.
2. Many items can be poisonous to your pets. The following is a list of items to be aware of, so put these items in a place that your pet cannot reach them.
3. Treats can be harmful to your pets. Some pets' digestive tracts can be sensitive to changes in food/treats, so try not to give your pet too many treats or a wide variety of treats, as this can cause an upset stomach.
4. Toys that are non-digestible or sharp (nylabones, real bones, and toys with string) can cause serious problems for pets. If you learn that your pet will always ingest their toys, be sure to buy toys that can be digested properly.
5. It may not look like a toy, but your pet will think it is! Make sure to look closely throughout your home and outdoors to find any items that your pet could potentially get hurt with, such as plastic bags, fireplaces, pools/hot tubs, space heaters, irons, rubber bands, buttons, sewing needles, thread, string/ribbons, etc.
6. 'Tis the season to be aware! We all love the holidays, but they do come with hazards. Be very cautious during each season to see what new toys your pet may find, such as Christmas lights, tinsel, lilies, etc.
7. Always keep an eye on your pets' collars and harnesses. Puppies and kittens can grow very fast, so be sure their accessories grow with them.



### Canine Poisons

1. Chocolate/raisins/grapes/onions/garlic
2. Household cleaners
3. Mouse/rat poisons
4. Vitamins/minerals (iron, Vitamin D3, etc.)
5. Medications (Tylenol, cardiac, etc.)
6. Xylitol (sugarless gum/candy)
7. Caffeine pills
8. Antifreeze
9. Lawn chemicals

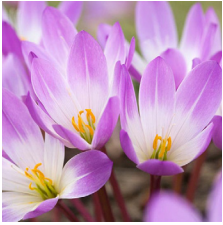


### Feline Poisons

1. Chocolate/raisins/grapes/onions/garlic
2. Household cleaners
3. Mouse/rat poisons
4. Vitamins/minerals (iron, Vitamin D3, etc.)
5. Medications (Tylenol, cardiac, etc.)
6. Xylitol (sugarless gum/candy)
7. Caffeine pills
8. Antifreeze
9. Lawn chemicals
10. Topical insecticides
11. Many plants (Philodendron, ivy, lilies, etc.)

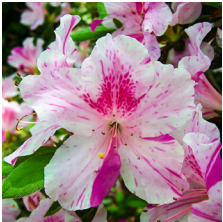
# TOP 10 POISONOUS PLANTS

## Tips from Pet Poison Helpline to Help Keep Your Pet Safe!



### Autumn Crocus

There are two types of Crocus plants: one that blooms in the spring (*Crocus* species) and the other in the autumn (*Colchicum autumnale*). The spring plants are more common and are part of the Iridaceae family. These ingestions can cause general gastrointestinal upset including vomiting and diarrhea. These should not be mistaken for Autumn Crocus, part of the Liliaceae family, which contains colchicine. The Autumn Crocus is highly toxic and can cause severe vomiting, gastrointestinal bleeding, liver and kidney damage, and respiratory failure. If you're not sure what plant it is, bring your pet to their veterinarian immediately for care. Signs may be seen immediately but can be delayed for days.



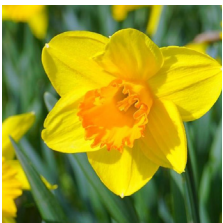
### Azalea

In the same family as rhododendrons, azaleas can have serious, negative health effects on pets. These plants contain grayanotoxins which disrupt sodium channels affecting the skeletal and cardiac muscle. All parts of the plant are considered poisonous, and ingestion as little as 0.2% of an animal's body weight can result in poisoning. Eating even a few leaves can result in vomiting, diarrhea, and excessive drooling. Without immediate veterinary attention, the pet could fall into a coma and possibly die. The overall prognosis is fair with treatment.



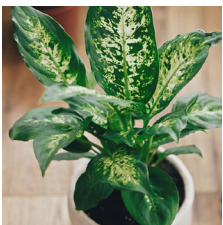
### Cyclamen

The cyclamen is a beautiful houseplant commonly sold in supermarkets. It is also called the Persian violet and Sowbread. Cyclamen contains irritating saponins, and when any part of the plant (especially the tubers or roots) are chewed or ingested by dogs and cats, it can result in clinical signs of drooling, vomiting, and diarrhea. With large ingestions, these plants can result in cardiac problems (e.g., abnormal heart rate and rhythm), seizures, and death.



### Daffodils

These flowers contain lycorine, an alkaloid with strong emetic properties (something that triggers vomiting). Ingestion of the bulb, plant, or flower can cause severe vomiting, diarrhea, abdominal pain, and even possible cardiac arrhythmias or respiratory depression. Crystals are found in the outer layer of the bulbs, similar to hyacinths, which cause severe tissue irritation and secondary drooling. Daffodil ingestions can result in more severe symptoms so if an exposure is witnessed or symptoms are seen, we recommend seeking veterinary care for further supportive care.



### Dieffenbachia

This plant is popular in homes and offices. Dieffenbachia species contain insoluble crystals of calcium oxalate called raphides. Chewing or biting into the plant releases the crystals which penetrate tissue resulting in injury. When dogs or cats ingest insoluble calcium oxalate-containing plants, clinical signs may be seen immediately and include pawing at face (secondary to oral pain), drooling, foaming, and vomiting. Moderate to severe swelling of the lips, tongue, oral cavity, and upper airway may also be seen, making it difficult to breathe or swallow.

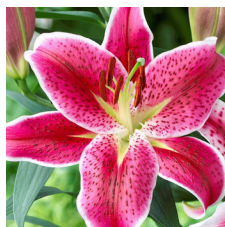


### Kalanchoe

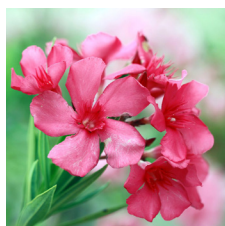
Kalanchoe is a common, beautiful houseplant with hundreds of flowers (which range from yellow, red, pink, etc.). All parts of the plant are generally considered toxic - even the water in the vase has been reported to cause toxicosis. Clinical signs from ingestion include cardiovascular signs (e.g., abnormal heart rhythm and rate), electrolyte abnormalities (e.g., a life-threatening high potassium level), gastrointestinal signs (e.g., nausea, drooling, vomiting, etc.), or central nervous system signs (e.g., dilated pupils, tremors, seizures). In severe cases, an expensive antidote, digoxin-specific Fab fragments, can be used for severe, life-threatening cases.



### Lilies

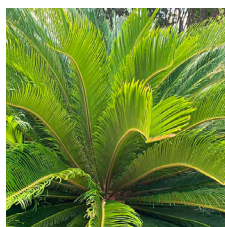


There are dangerous and benign lilies out there, and it's important to know the difference. Peace, Peruvian, and Calla lilies contain oxalate crystals that cause minor effects, such as tissue irritation to the mouth, tongue, pharynx, and esophagus - resulting in minor drooling. The more dangerous, potentially fatal lilies are True lilies, and these include Tiger, Day, Asiatic, Easter and Japanese Show lilies - all of which are highly toxic to cats! Even small ingestions (such as 2-3 petals or leaves) can result in severe kidney failure. If your cat is seen consuming any part of a lily, bring your cat (and the plant) immediately to a veterinarian for medical care. The sooner you bring your cat in, the better and more efficiently we can treat the poisoning. Decontamination (like inducing vomiting and giving binders like activated charcoal) are imperative in the early toxic stage, while aggressive intravenous fluid therapy, kidney function monitoring tests, and supportive care can greatly improve the prognosis.



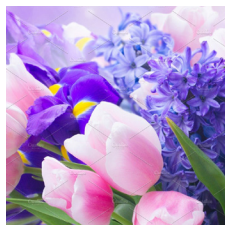
### Oleander

Oleander is an outdoor shrub, popular for its evergreen qualities and delicate flowers. All parts of the plant are generally considered toxic - even the water in the vase has been reported to cause toxicosis; however, the leaves and flowers are extremely toxic if ingested and can cause severe vomiting, slow the heart rate, and possibly even cause death.



### Sago Palm

Very popular in warmer climates, this household and outdoor plant can be very harmful to pets. All parts of sago palm are considered poisonous, with the seeds (nuts) being the most toxic part of the plant. Sago palm contains cycasin, which is the primary active toxic agent that causes severe liver failure in dogs. Ingestion results in acute gastrointestinal signs (e.g., drooling, inappetance, vomiting, diarrhea) within 15 minutes to several hours after ingestion. Central nervous system signs (e.g., weakness, ataxia, seizures, tremors, etc.) and severe liver failure can be seen within 2-3 days post-ingestion.



### Tulips and Hyacinths

Tulips contain allergenic lactones while hyacinths contain similar alkaloids. The toxic principle of these plants is very concentrated in the bulbs (versus the leaf or flower), so make sure your dog isn't digging up the bulbs in the garden. When the plant parts or bulbs are chewed or ingested, it can result in tissue irritation to the mouth and esophagus. Typical signs include profuse drooling, vomiting, or even diarrhea, depending on the amount consumed. There's no specific antidote, but with supportive care from the veterinarian (including rinsing the mouth, anti-vomiting medication, and possibly subcutaneous fluids), animals do quite well. With large ingestions of the bulb, more severe symptoms such as increased heart rate and changes in respiration can be seen, and should be treated by a veterinarian. These more severe signs are seen in cattle or our overzealous, chowhound Labradors.

This is only a partial list of poisonous plants. For a more complete list of plants poisonous to cats and dogs, visit: [www.petpoisonhelpline.com/poisons](http://www.petpoisonhelpline.com/poisons).

If you suspect your pet has ingested any of these items or any other questionable substance, call Pet Poison Helpline or your veterinarian for assistance. Accurate and timely identification of the suspected substance is very important. Having the container, package, or label in hand will save valuable time and may save the life of your pet.

About Pet Poison Helpline: Pet Poison Helpline is a service available 24 hours, seven days a week for pet owners, veterinarians and veterinary technicians that require assistance treating a potentially poisoned pet. Staff can provide treatment advice for poisoning cases of all species, including dogs, cats, birds, small mammals, large animals and exotic species. As the most cost-effective option for animal poison control care, Pet Poison Helpline's fee of \$39.00 per incident includes follow-up consultation for the duration of the poison case. **Pet Poison Helpline is available in North America by calling 800-213-6680.** Additional information can be found online at [www.petpoisonhelpline.com](http://www.petpoisonhelpline.com).

[www.petpoisonhelpline.com](http://www.petpoisonhelpline.com) | 3600 American Boulevard W., Suite 725 Bloomington, MN 55431 | [@petpoisonhelp](https://twitter.com/petpoisonhelp)

# SIGNS YOUR DOG NEEDS TO SEE THE VET



- Vomiting
- Diarrhea
- Unintended weight loss
- Change in appetite - decreased or increased
- Change in normal activity level: lethargy, hyperactivity, or restlessness
- Limping
- Sudden inability to move back legs
- Crying in pain when touched
- Clumsy or disoriented behavior

- Seizures
- Any loss of consciousness
- Coughing, especially at night
- Panting in a cat
- Any difficulty breathing or labored breathing
- Any blue, purple, or pale hue to the tongue and gums
- Sudden collapse
- Excessive drooling
- Straining in the litter box without producing any urine
- Crying out while urinating

- Change in urination: location, frequency, amount, color, smell
- Bloating abdomen
- Sneezing excessively
- Uncontrolled bleeding
- Nose-bleed or bruising anywhere on body
- Any unusual odor
- Hair loss
- Runny eyes or nose
- Squinting

## EMERGENCY VETERINARY HOSPITALS



### VRCC

Veterinary Referral and Critical Care  
1596 Hockett Road  
Manakin-Sabot, VA 23103  
(804) 784-8722  
[vrccvet.com](http://vrccvet.com)

### BluePearl Specialty and Emergency Pet Hospital

5918 West Broad Street  
Richmond, VA 23230  
(804) 716-4700  
[bluepearlvvet.com](http://bluepearlvvet.com)

### VVC

Virginia Veterinary Centers  
3312 West Cary Street  
Richmond, VA 23221  
(804) 353-9000  
[virginiaveterinarycenters.com](http://virginiaveterinarycenters.com)